2015 Significant Code Changes

Code Review Partners:

- City of Killeen Building Inspections Department
- Killeen Construction Board of Appeals
- City of Harker Heights Building Department
- Central Texas Homebuilders Association
- Interested Builders, Contractors and Citizens
- Killeen City Council

Killeen CBOA

2015 Significant Code Changes

Purpose:

Review the significant code changes:

- **2009 to 2015 I-Codes**
- **2008 to 2014 NEC**
- **Local Amendments**

2015 Significant Code Changes

Killeen Code Adoption History:

- **1988 SBC & 1993 NEC (May 1990) [12 years]**
- **2000 IBC & 1999 NEC (May 2002) [4 years]**
- **2003 IBC & 2005 NEC (Feb 2006) [3 years]**
- **2006 IBC & 2009 NEC (Feb 2009) [2 years]**
- **2009 IRC & 2008 NEC (Feb 2011) [4 years..]**
- ~~**2012 IBC & 2011 NEC**~~ **(tabled in 2013)**
- **2015 IBC & 2014 NEC (October 2015?)**

2015 Significant Code Changes

Benefits of Adopting New Codes:

- Provide the highest quality codes, standards and products in which to construct with.
- Protect the health, safety and welfare of our citizens by creating safe buildings and community.
- Provide minimum standards for energy-efficient buildings.
- Provide minimum standards for light, ventilation, space, heating, sanitation and safety from fire and other hazards.
- Maintain and Improve our ISO Rating.

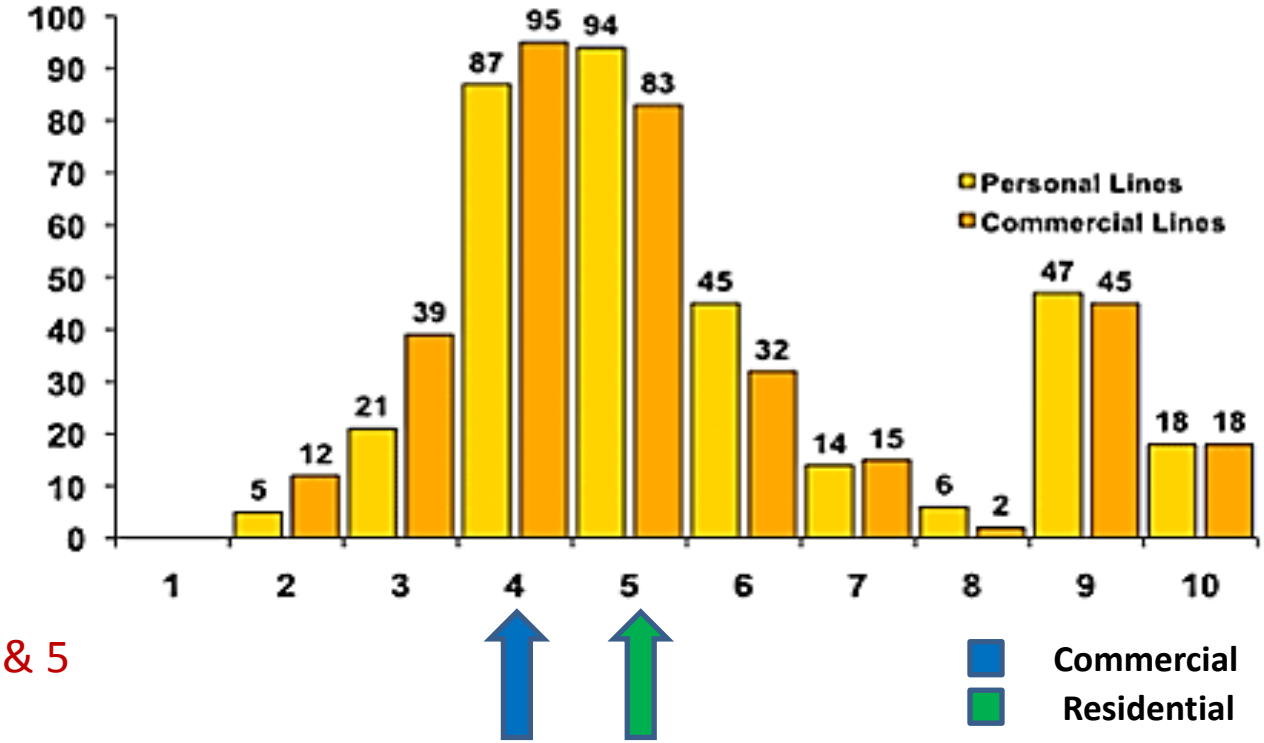
2015 Significant Code Changes

ISO's Building Code Effectiveness Grading Schedule (BCEGS)

- Assesses the building codes in effect.
- Well-enforced, up-to-date codes demonstrate less loss experience during natural hazards.
- Benefits are safer buildings, less damage, and lower insured losses from catastrophes.
- The program assigns each community a grade between 1 to 10 (lower the better).
- Grading is based upon adoption of newer codes; level of certified staff; use of check list in plans review and inspections; and level of enforcement (Stop Work).

2015 Significant Code Changes

2014 Building Code Effectiveness Grading Schedule for Texas One & Two Family Dwellings



*2008 was 5 & 5

2015 Significant Code Changes

Code Review Timeline:

- April / May – Joint code changes review (Killeen Staff/CBOA/CTHBA/Contractors/Harker Heights/KISD)
- June 18 – Present code changes to CTHBA assembly
- July 20 – Ordinance review with CBOA
- August – City Council workshop?
- October 01 – Effective date?

2015 Significant Code Changes

Past Joint Code Review Workshops

April 01, 2015	IPMC & NEC
April 08, 2015	IPC & IFGC
April 15, 2015	IMC & IECC
April 22, 2015	IEBC & IBC
April 29, 2015	IRC (Pt 1)
May 06, 2015	IRC (Pt 2)

2015 Significant Code Changes

2015 Residential Building Code

(Condensed Version)

2015 IRC

Chapter 2 Definitions

CHANGE SUMMARY:

The **3,000 sq ft** area limitation has been removed from the **2015 IRC** based on the residential setting of these buildings.

The reason: Accessory buildings in rural areas tend to be larger and the fact that dwellings and townhomes constructed under the IRC are unlimited in area.

Accessory Structure

2015 IRC

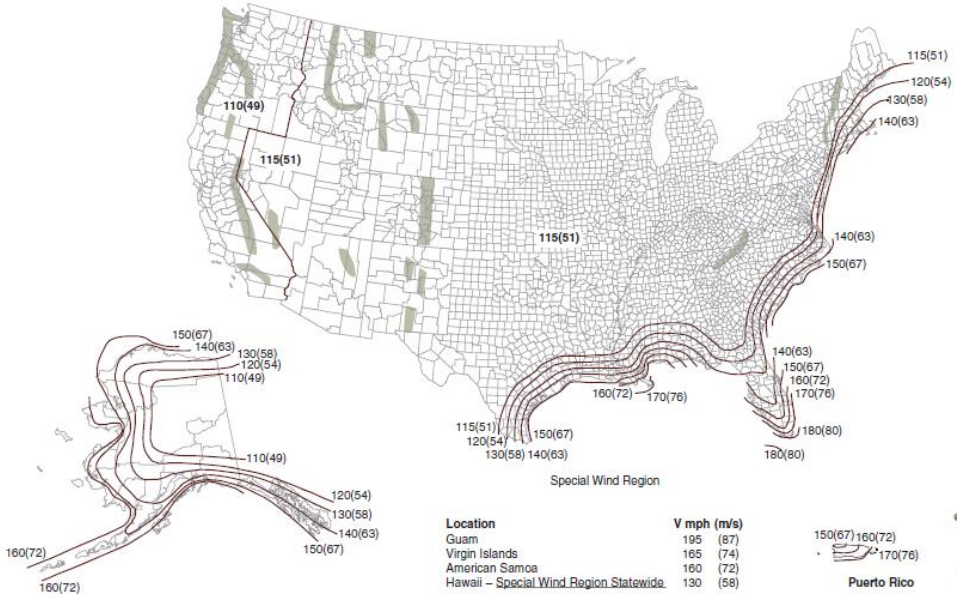
Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R301.2 Wind Speed Maps.

New to the **2015 IRC**, wind maps use ultimate design wind speeds.

From 90 mph to 115 mph



2012 IRC

Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R302.5.1 Opening Protection. Doors between the **garage** **and** **dwelling unit** now require **self-closing** devices.

1 3/8” solid wood door

Solid or honeycomb core steel door

20-minute fire-rated door

2012 IRC

Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R303.4 Mechanical Ventilation. Where the **air infiltration rate** of a dwelling unit is less than **5 air changes/hour** when tested with a blower door at a pressure of **0.2 inch w.c. (50 Pa),** the dwelling unit shall be provided with **whole house** mechanical ventilation in accordance with Section M1507.3.

2015 IRC

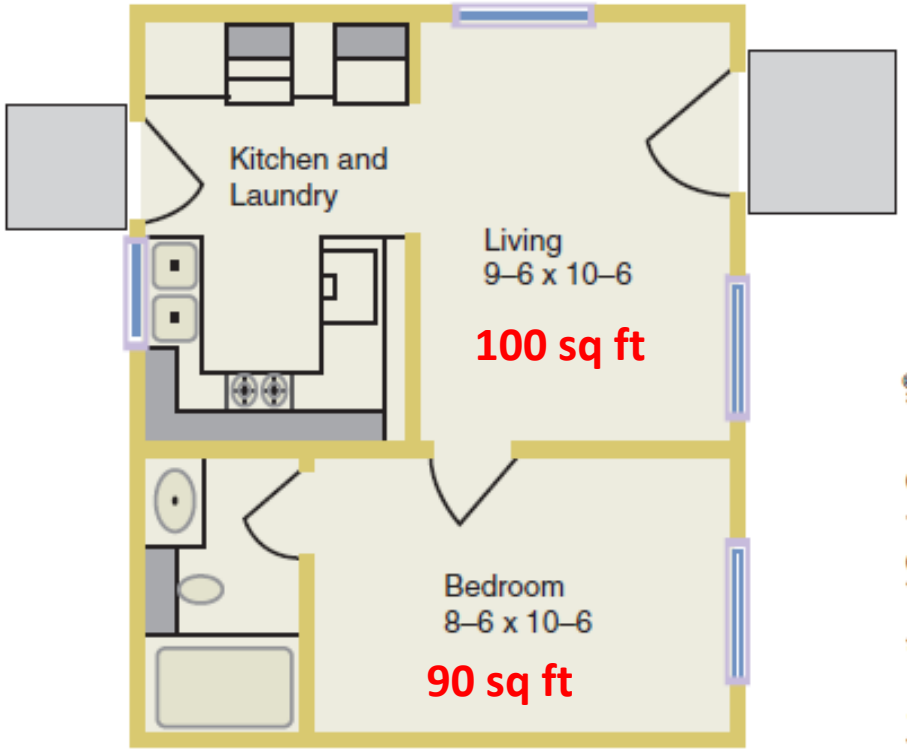
Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R304.1 Minimum area.

The requirement for **one habitable room** with a min floor area of **120 sq ft** has been removed from the code. **Habitable rooms** shall have a floor area of not less than **70 sq ft**.

(except kitchen)



Small dwelling complying with minimum area requirements

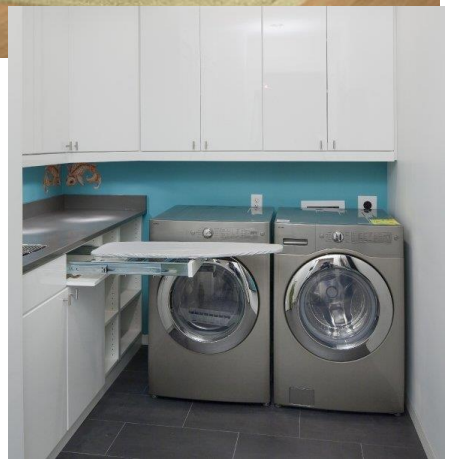
2015 IRC

Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R305.1 Minimum height.

The minimum ceiling height for bathrooms, toilet rooms, and laundry rooms has been reduced to **6 ft - 8 in.**



2012 IRC

Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R308.4 Hazardous Locations. Reorganization of the **safety glazing** requirements results in provisions that are more user friendly. Each hazardous location now has its own **subsection number** and **title**, making the applicable requirement easier to locate.

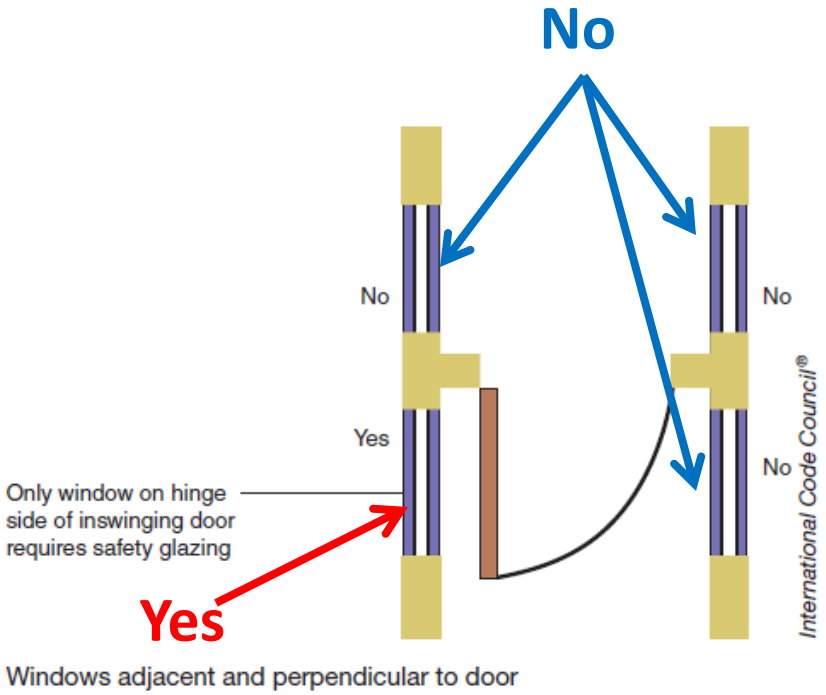
2015 IRC

Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R308.4.2 Glazing adjacent to doors.

Glazing installed **perpendicular** to a door in a closed position and within **24 inches** of the door only requires **safety glazing** if it is on the **hinge side** of an in-swinging door.



Windows adjacent and perpendicular to door

2012 IRC

Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

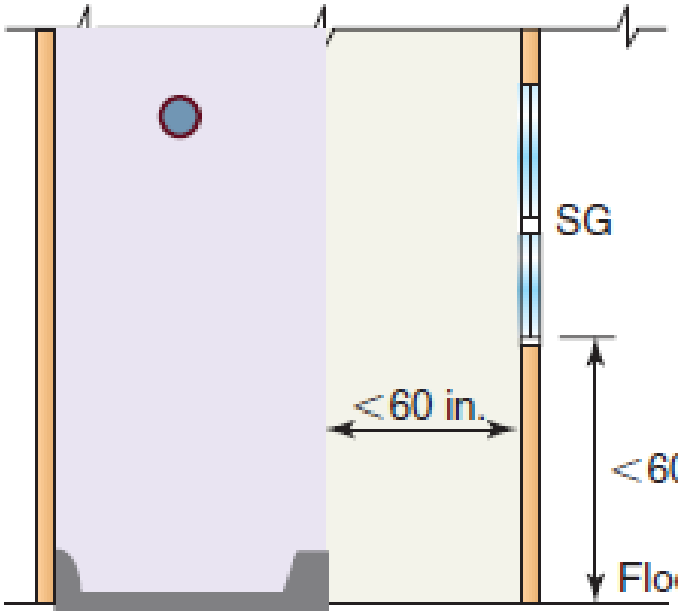
R308.4.5 Glazing and Wet Surfaces. The separate provisions regulating **glazing** near **tubs** and **swimming pools** have been consolidated into one subsection.

2015 IRC

Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R308.4.5 Glazing and Wet Surfaces. The exception from the **safety glazing** requirements for glazing that is **60 inches or greater** from the water's edge has been expanded to include **glazing** that is an equivalent distance from the edge of a **shower**, **sauna**, or **steam room.**



Section view

International Code Council®

2012 IRC

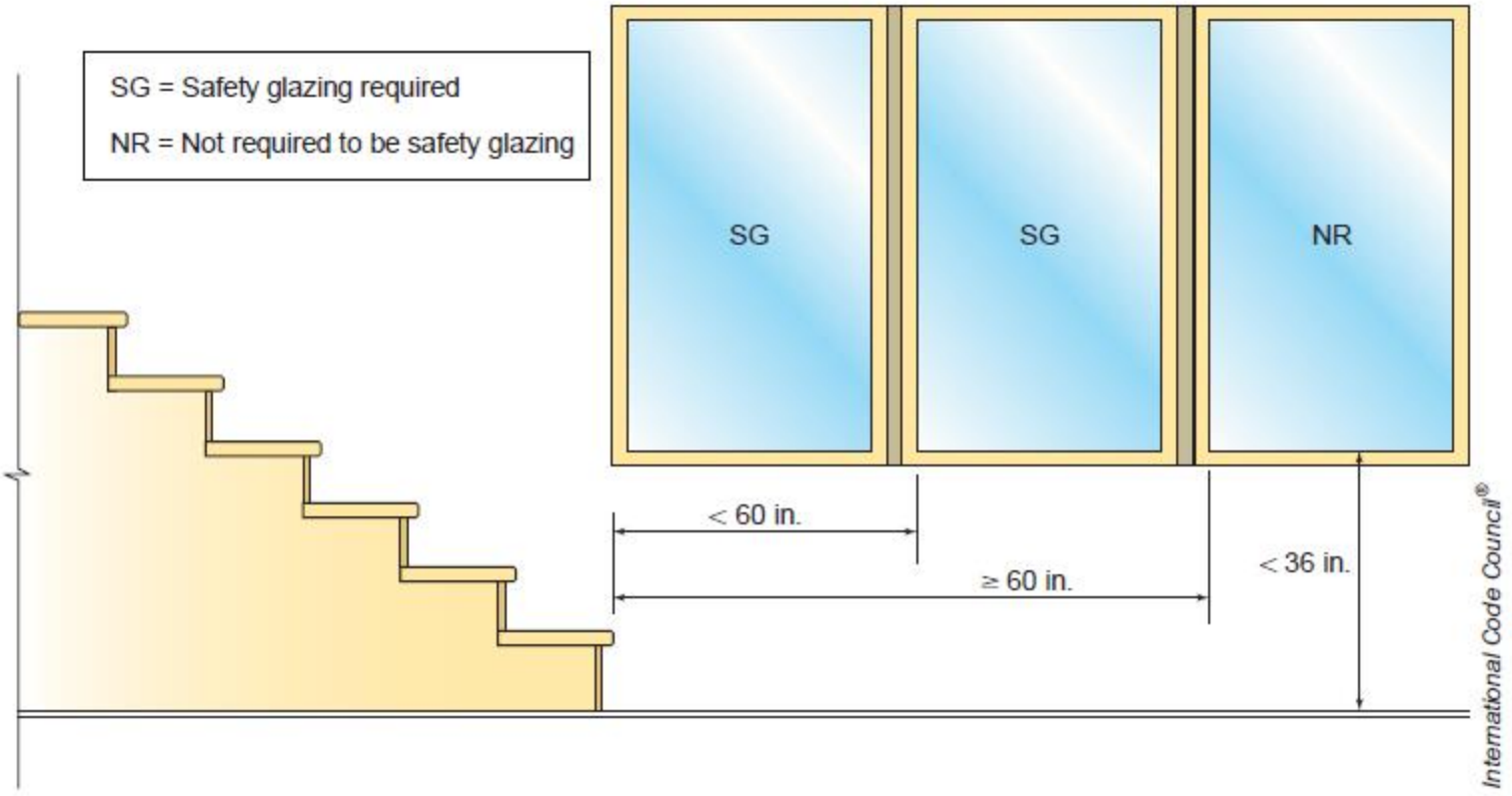
Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R308.4.6 Glazing Adjacent Stairs and Ramps. For **glazing** not to be considered to be in a **hazardous location** the **minimum** height above a tread at the side of a stairway is now **36.”**

2012 IRC

Chapter 3 Building Planning and Construction



Glazing adjacent to the bottom landing of a stairway.

2012 IRC

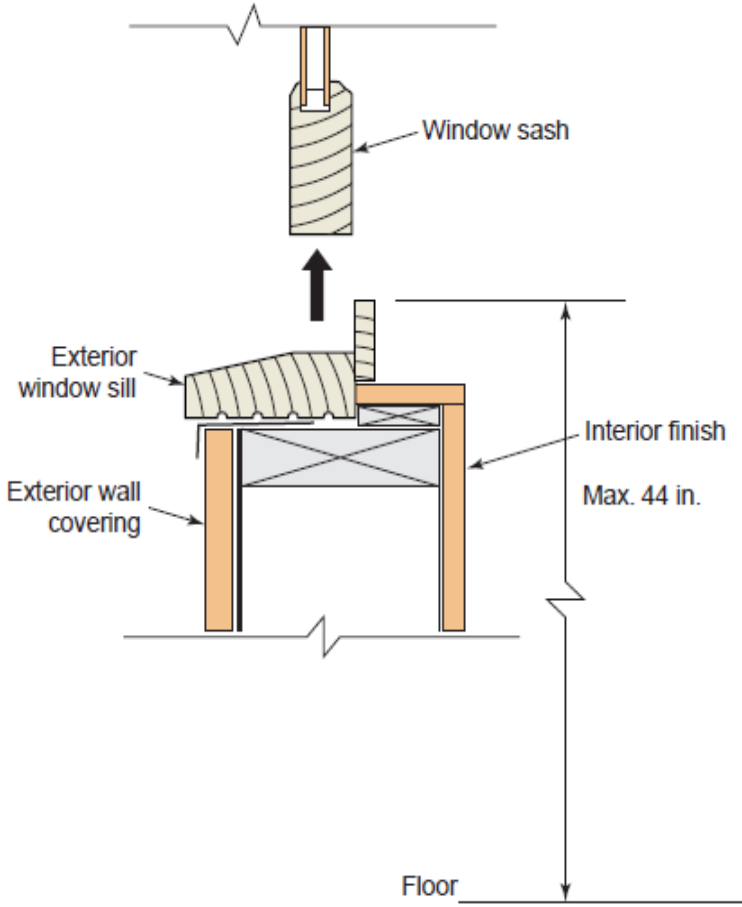
Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R310.1 Emergency Escape and Rescue Required.

The maximum **sill height** for an **emergency** escape and rescue opening is now measured from the finished floor to the bottom of the clear opening.

Max 44”



The maximum sill height for emergency escape and rescue openings is measured from the floor to the bottom of the clear opening.

2012 IRC

Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R311.1 Means of egress.

The required **egress door** of a dwelling unit must open directly into a **public way** or to a **yard or court** that opens to a public way.

2012 IRC

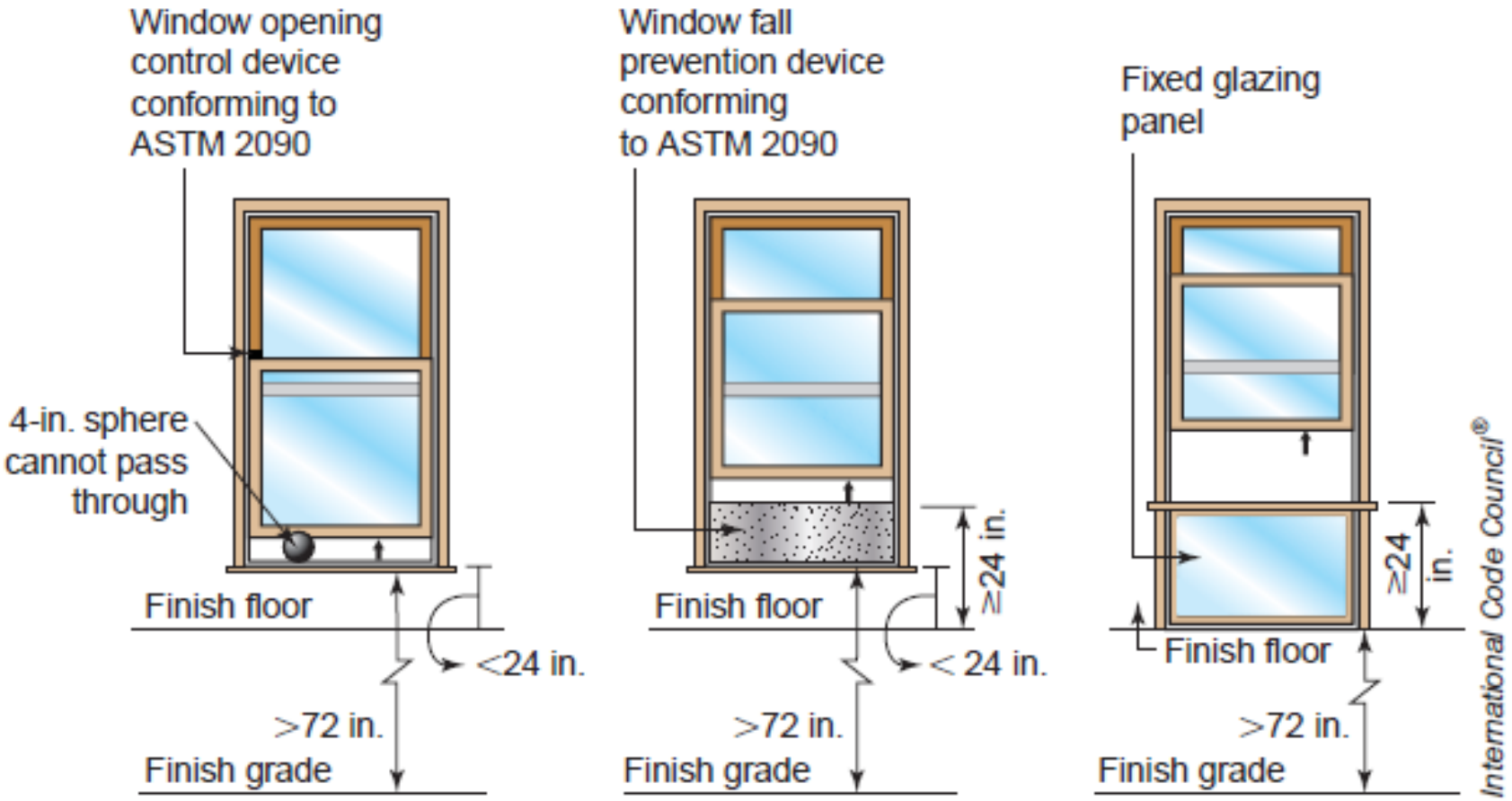
Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R312 GUARDS AND WINDOW FALL PROTECTION. The terminology for **window opening control devices** has been updated for consistency with the referenced standard **ASTM F 290**.

2012 IRC

Chapter 3 Building Planning and Construction



Alternatives to minimum window sill height.

2015 IRC

Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R314.2 Where required.

Battery-operated **smoke alarms** are permitted for satisfying the **smoke alarm** power requirements when **alterations**, **repairs**, and **additions** occur.

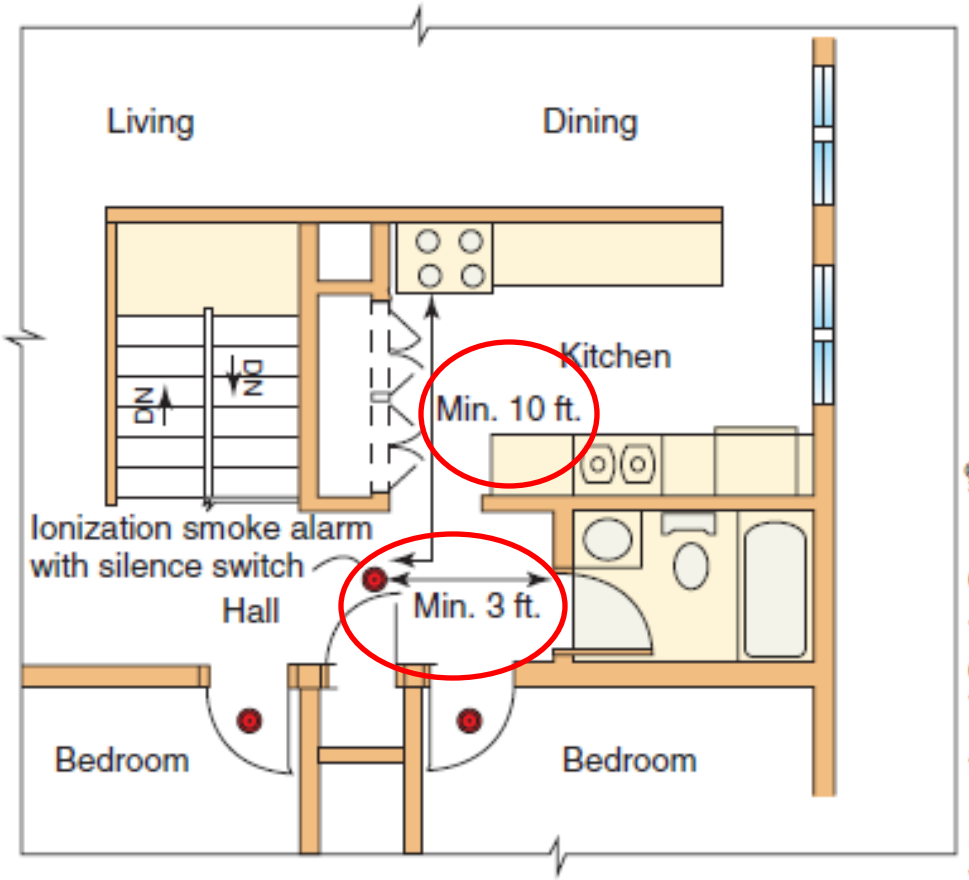
2015 IRC

Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R314.2 Where required.

New provisions address **smoke alarms** installed near **bathrooms** and **cooking appliances**.



Smoke alarm distances from bathrooms and cooking appliances

2012 IRC

Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R314.4 Power Source. Wireless **smoke alarms** are now specifically approved for satisfying the **interconnection** requirements for both new and existing dwellings.

2015 IRC

Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R315.2 Where required.

Exterior work such as roofing, siding, windows, doors, and deck and porch additions no longer trigger the **carbon monoxide alarm** provisions for existing buildings.

Carbon monoxide alarm

2015 IRC

Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R315.2 Where required.

An attached garage is one criterion for requiring **carbon monoxide alarms**, but only if the garage has an opening into the dwelling.

© Creations/Shutterstock.com.

Carbon monoxide alarm

2015 IRC

Chapter 3 Building Planning and Construction

CHANGE SUMMARY:

R315.2 Where required.

A **carbon monoxide alarm** is required in bedrooms when there is a **fuel-fired appliance** in the bedroom or adjoining bathroom.

© Creations/Shutterstock.com.

Carbon monoxide alarm

2015 IRC

Chapter 4 Foundations

CHANGE SUMMARY:

R404.4 Retaining walls.

Freestanding **retaining walls** not supported at the top, with more than **48 inches** of unbalanced backfill must be designed by an **engineer**.

Retaining walls resisting additional lateral loads and with more than **24 inches** of unbalanced backfill must also be designed in accordance with **accepted engineering practice**.

2015 IRC

Chapter 5 Floors

CHANGE SUMMARY:

Tables R502.3.1(1) and R502.3.1(2).

Span lengths for **Southern Pine** have decreased; lengths for **Douglas fir-larch** and **Hem-fir** joists have increased.

2015 IRC

Chapter 5 Floors

Example—Floor Spans

#1 Bedroom

Dead load = 10 psf
2×10 joists
16″ o.c. spacing
Southern Pine (SP) #2

Maximum Span Allowed	2012	2015
	18′-0″	15′-8″

The SP #2 span length is significantly reduced from the 2012 IRC span length.

Note: An SP #1 joist will span about the same length in the 2015 IRC Table R502.3.1(1) or R502.3.1(2) as the SP #2 did in the tables in the 2012 IRC.

#2 Bathroom

Dead load = 20 psf
2×8 joists
16″ o.c. spacing
Douglas Fir-Larch (DFL) #2

Maximum Span Allowed	2012	2015
	11′-6″	11′-8″

The span has increased about 2 inches which is the typical increase in the table. Some cells for Douglas Fir and Hemlock have not changed. Others increased by 1-2 inches.

Floor joist span examples

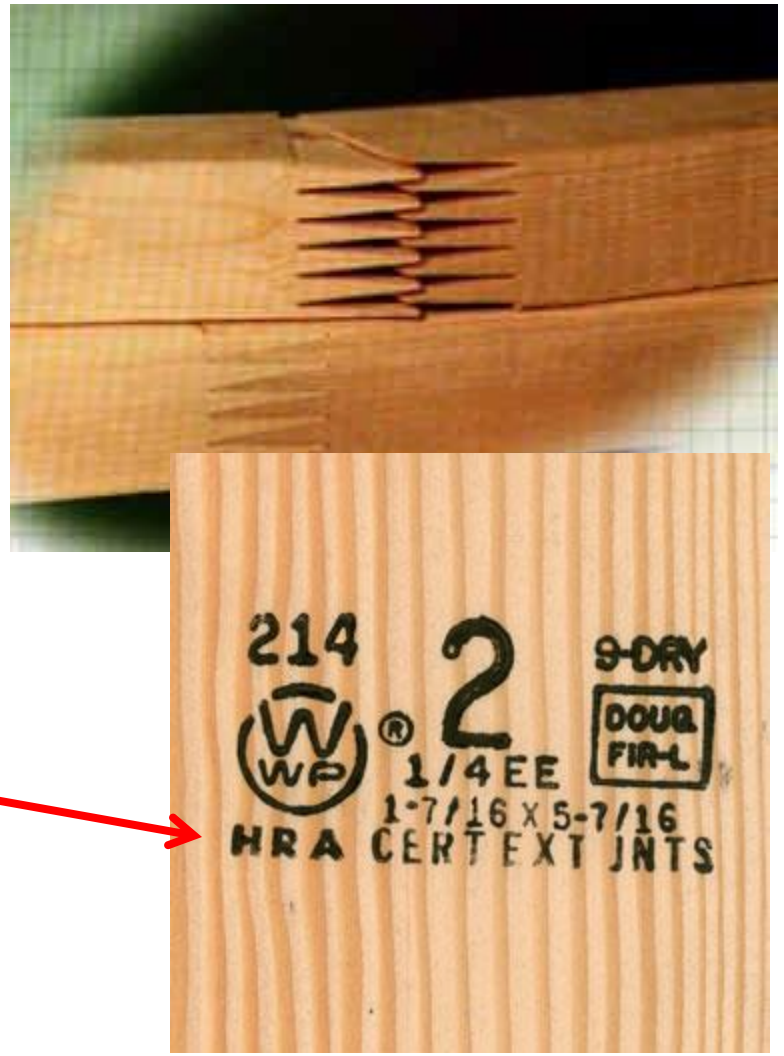
2012 IRC

Chapter 6 Wall Framing

CHANGE SUMMARY:

R602.1.1 End-jointed Lumber.

End-jointed lumber used in **fire-rated assemblies** must have **HRA** in the grade mark.

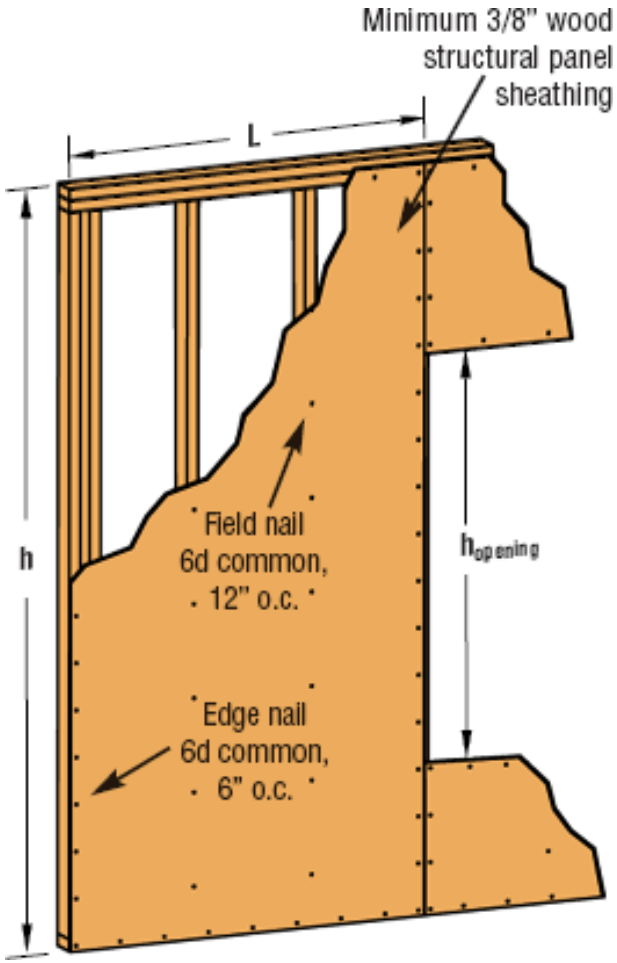


2012 IRC

Chapter 6 Wall Framing

CHANGE SUMMARY:

R602.10.2.2 Locations of Braced Wall Panels. A **braced wall panel** shall begin within **10 f**t from each end of a **braced wall line** and the distance between adjacent edges of **braced wall panels** along a **braced wall line** shall be no greater than **20 ft.**



2015 IRC

Chapter 6 Wall Framing

CHANGE SUMMARY:

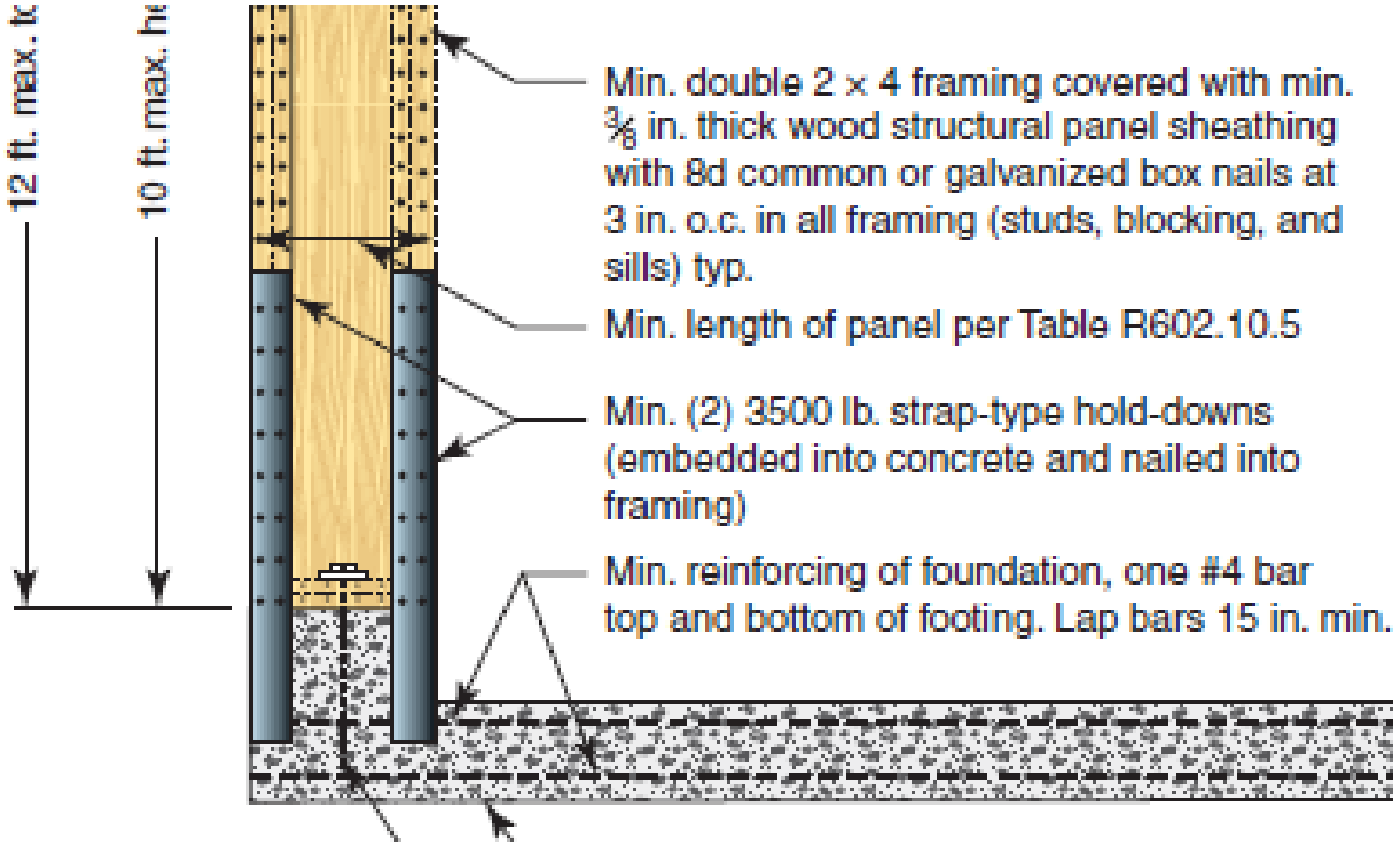
R602.10.6.2 Method PFH: Portal frame with hold downs.

Due to recent testing… the min required capacity of the **hold downs** is lowered from 4200 lbs to **3500 lbs**.

Additionally, two **sill plates** are sufficient under each braced wall panel of the portal rather than the previous three **plates**.

2015 IRC

Chapter 6 Wall Framing



2015 IRC

Chapter 6 Wall Framing

CHANGE SUMMARY:

TABLE R602.10.3(1) Bracing Requirements Based on Wind Speed.

Values in Table R602.10.3(1) for required minimum bracing length changed slightly as the new **ultimate design wind speeds** were used to calculate bracing.

Previously, there were **four** wind speed categories—85, 90, 100, and 110 mph.

Now there are **five** categories—110, **115**, 120, 130, and 140 mph.

2015 IRC

Chapter 6 Wall Framing

TABLE R602.10.3(1) Bracing Requirements Based on Wind Speed

- Exposure Category B
- 30-Foot Mean Roof Height
- 10-Foot Eave-to-Ridge Height
- 10-Foot Wall Height
- 2 Braced Wall Lines

Ultimate Design Wind Speed (mph)	Story Location	Braced Wall Line Spacing (feet)	Minimum Total Length (Feet) of Braced Wall Panels Required Along Each Braced Wall Line[a]			
			Method LIB[b]	Method GB	Methods DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP, ABW, PFH, PFC, CS-SFB[c]	Methods CS-WSP, CS-G, CS-PF
<115		10	3.5	3.5	2.0	2.0
		20	6.5	6.5	3.5	3.5
		30	9.5	9.5	5.5	4.5
		40	12.5	12.5	7.0	6.0
		50	15.0	15.0	9.0	7.5
		60	18.0	18.0	10.5	9.0
		10	7.0	7.0	4.0	3.5
		20	12.5	12.5	7.5	6.5
		30	18.0	18.0	10.5	9.0
		40	23.5	23.5	13.5	11.5
		50	29.0	29.0	16.5	14.0
		60	34.5	34.5	20.0	17.0

2012 IRC

Chapter 7 Wall Covering

CHANGE SUMMARY:

R703.8 Flashing. Pan flashing, a newly defined term in the code, is now required for **window** and **door openings** when flashing details are not provided by the manufacturer.

2015 IRC

Chapter 8 Roof – Ceiling Construction

CHANGE SUMMARY:

R802.4 and 802.5 Ceiling Joists and Rafter Tables. The **2015 IRC span tables** are in agreement with **standard span tables.**

For **Southern Pine**, the changes reflect shorter spans. For **Douglas Fir-Larch** and **Hemlock Fir**, the changes result in slightly longer spans.

2015 IRC

Chapter 8 Roof – Ceiling Construction

Example—Ceiling Joint Spans

#1 Uninhabitable attic with limited storage

LL = 20 psf
DL = 10 psf
2×10 joists
16″ o.c. spacing
SP #2

Maximum Span Allowed	2012	2015
	20′-9″	18′-1″

The SP #2 span length is significantly reduced from the 2012 IRC span length.

Note: An SP #1 joist will span about the same length in the 2015 IRC Table R802.4(1) or R802.4(2) as the SP #2 did in the tables in the 2012 IRC.

#2 Uninhabitable attic without storage

LL = 10 psf
DL = 5 psf
2×8 joists
24″ o.c. spacing
DFL #2

Maximum Span Allowed	2012	2015
	18′-9″	19′-1″

The span has increased about 2 inches which is the typical increase in the table. Some cells for Douglas fir and Hemlock fir have not changed. Others increased by 1–2 inches.

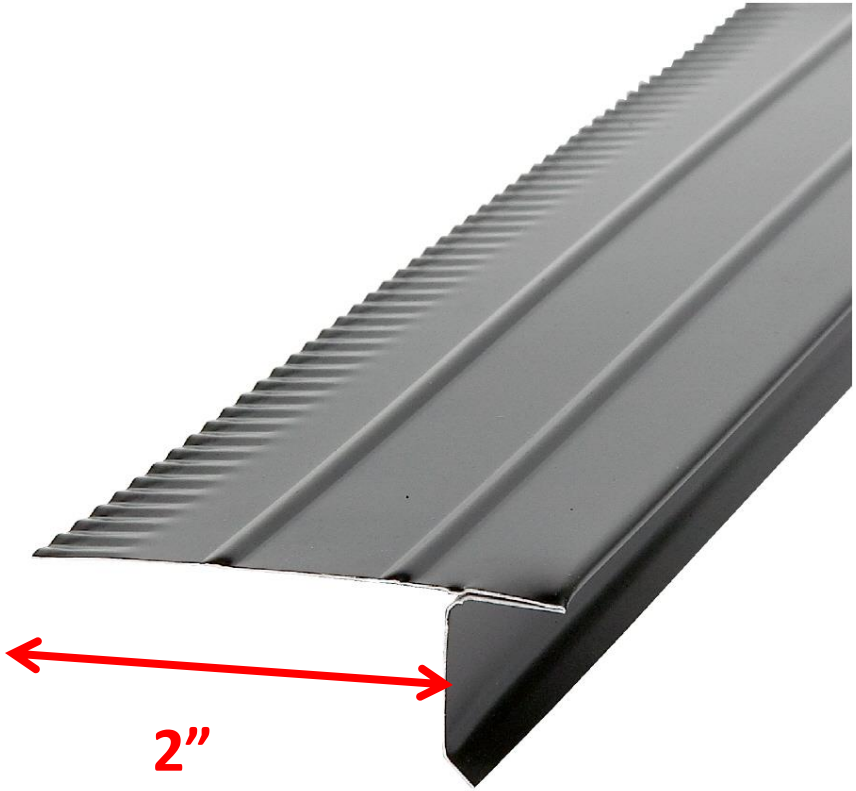
2012 IRC

Chapter 8 Roof – Ceiling Construction

CHANGE SUMMARY:

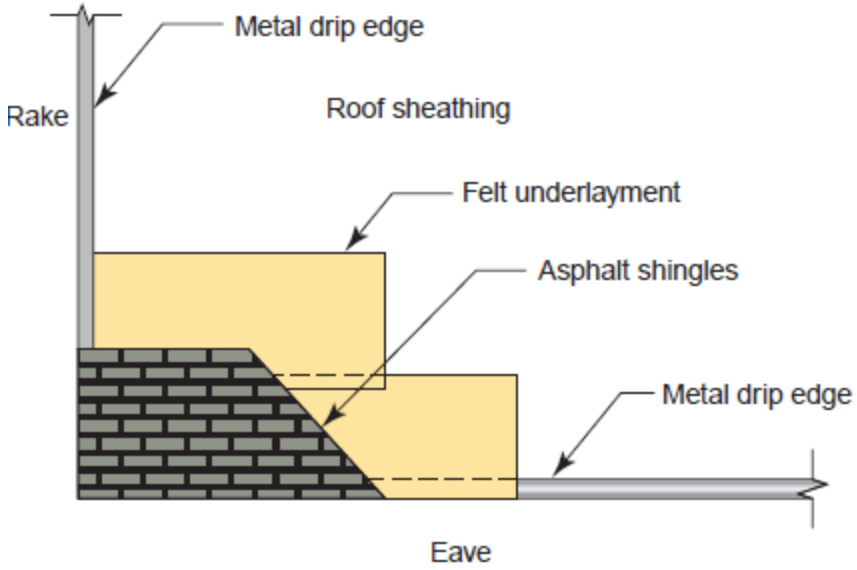
R905.2.8.5 Drip Edge.

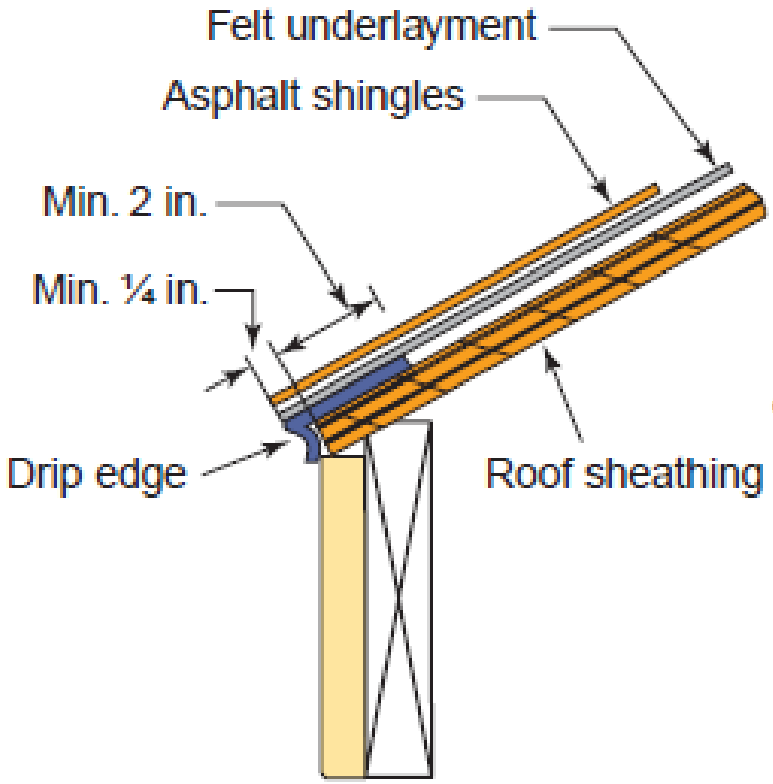
A roof **drip edge** is now required for asphalt shingles.



2012 IRC

Chapter 8 Roof – Ceiling Construction





Section at eave

2012 IRC

Chapter 9 Roof Assemblies

CHANGE SUMMARY:

R907.3 Recovering Versus Replacement.

The limitations on **reroofing** in hail zones have been deleted from the code.

(2 or more layers = tear-off)

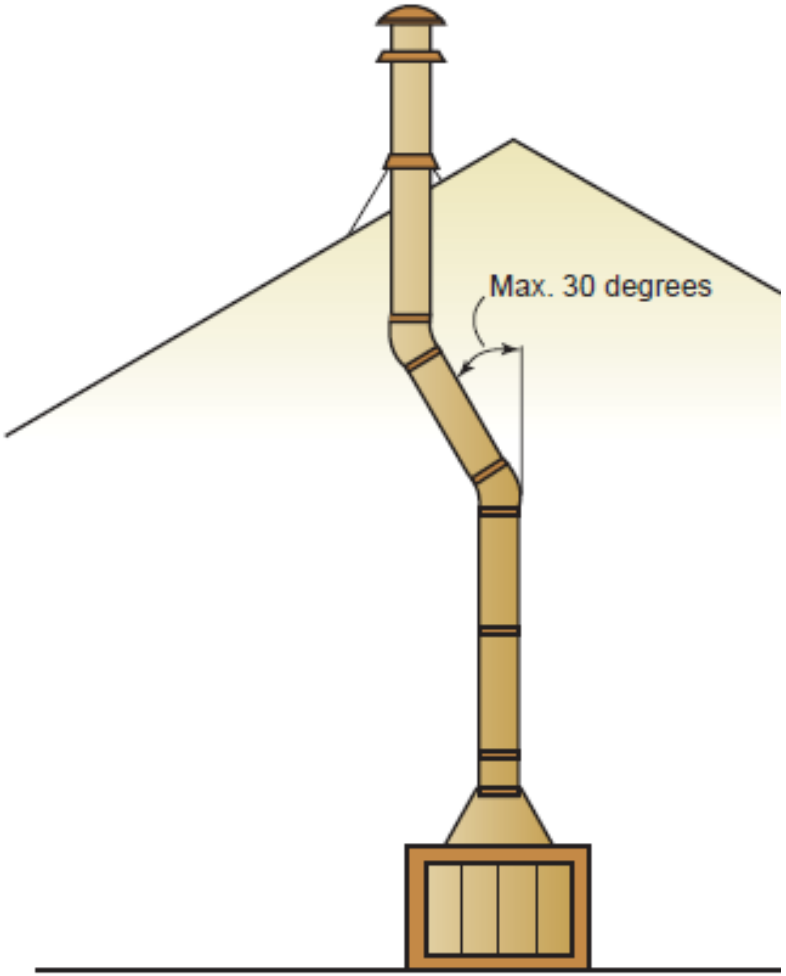
2012 IRC

Chapter 10 Chimneys and Fireplaces

CHANGE SUMMARY:

R1005.7 Factory Built Chimney Offsets.

Factory-built chimney assemblies must be installed vertically with no offsets greater than **30 degrees**. No more than **four elbows** are permitted within the entire length of the chimney assembly.



Factory-built chimney offsets

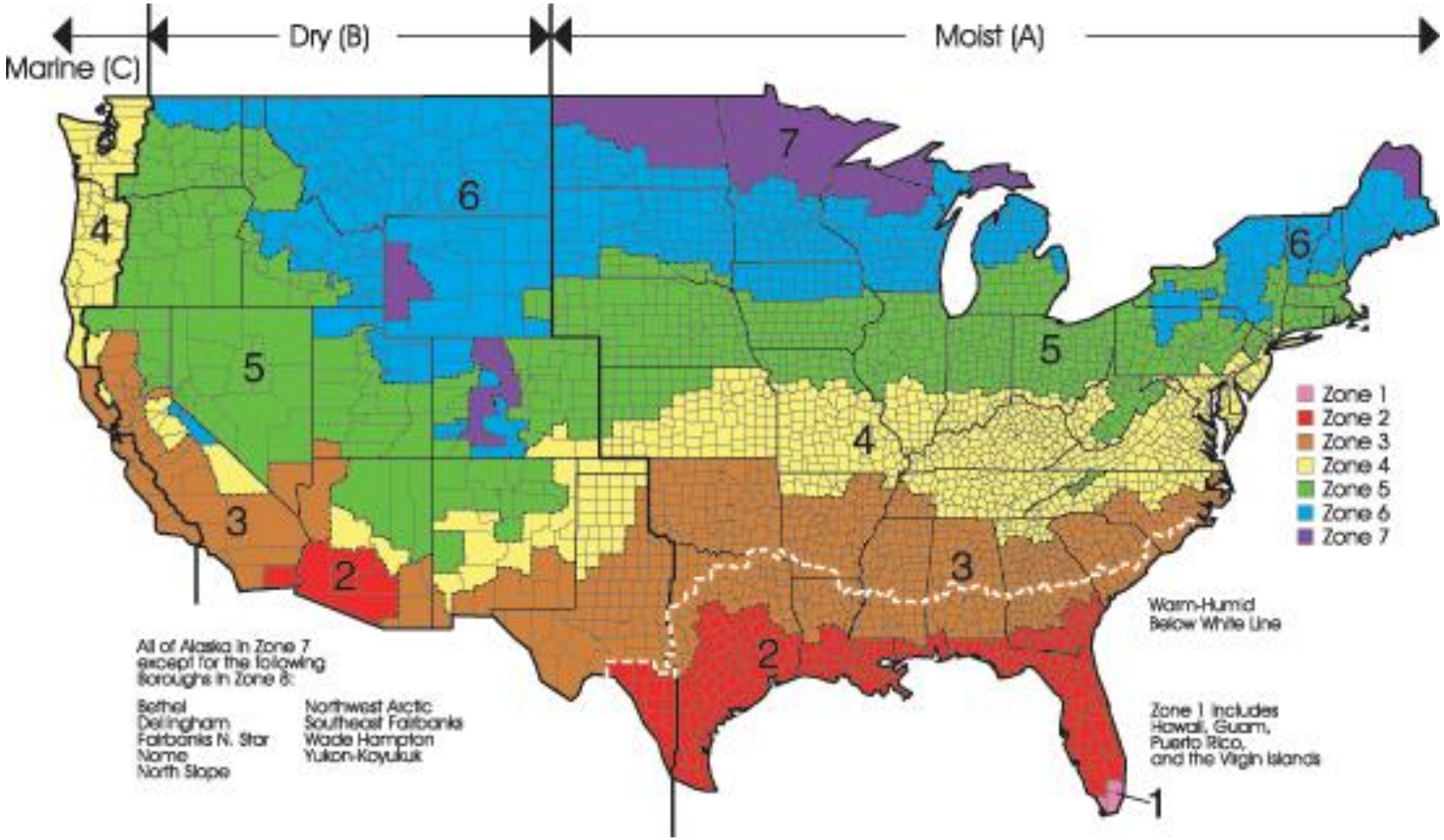
Residential Energy
2015 IRC & IECC

Energy Code Ambassadors

South-central Partnership Energy Efficiency Resource

2015 IECC - Residential

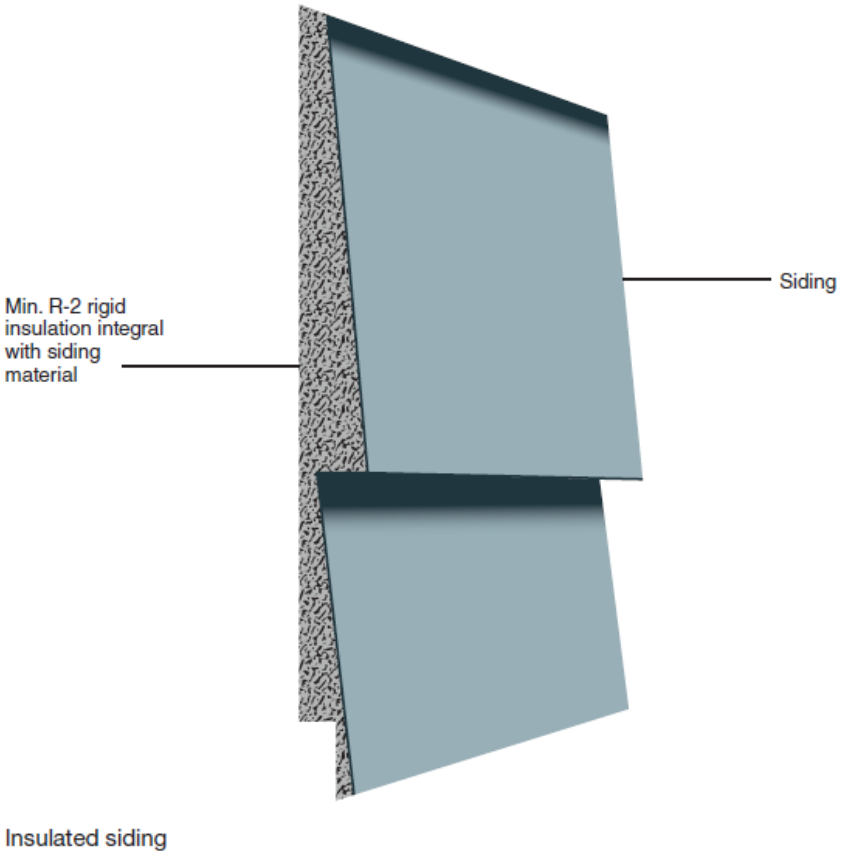
Figure R301.1 Climate Zones
(Bell Co = 2(A) Moist / Warm-Humid)



2015 IECC – Residential Chapter 11

N1102.1.3 The code now allows **insulated siding** to be used.

The labeled **R-value** for the siding must be reduced by **R-0.6** for calculation purposes.



2015 IECC – Residential Chapter 11

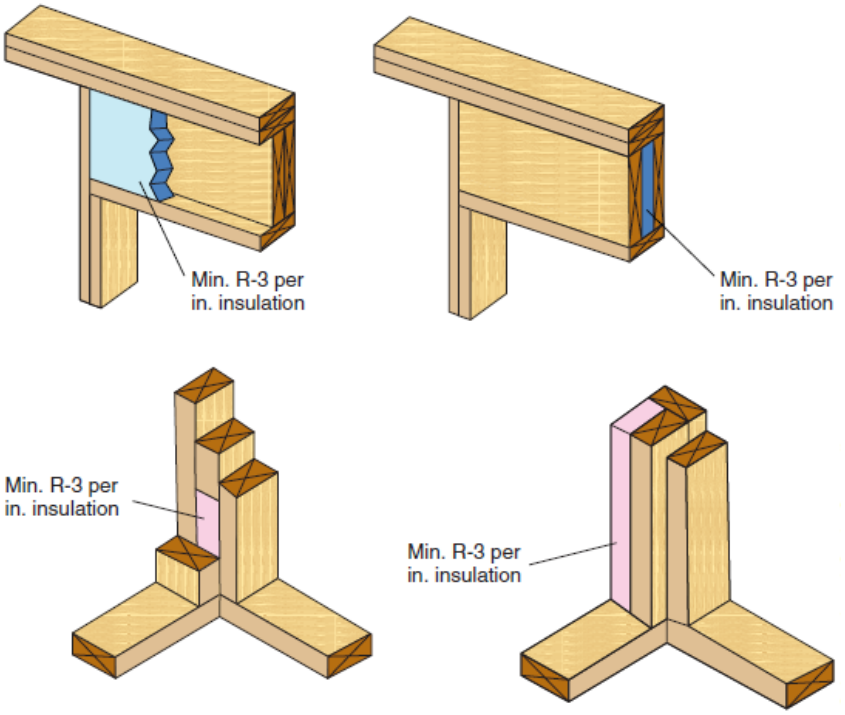
N1102.2.4 Access doors from conditioned spaces to unconditioned spaces such as **attics** and **crawl spaces** shall be weatherstripped and insulated to a level equivalent to the insulation on the surrounding surfaces.

Access shall be provided to all equipment that prevents damaging or compressing the insulation.

2015 IECC – Residential Chapter 11

Change summary:

N1102.4.1.1 Insulation requirements at framed **wall corners** and **headers** only apply when there is space to install insulation. The minimum insulation thermal resistance is **R-3** per inch of insulation.



Insulation required to fill space at headers and exterior wall corners

2012 & 2015 IECC - Residential

R402.1.2 Insulation and Fenestration Requirements

R-Value	2009	2012	2015
Attic	R30	R38	R38
Wood Frame Wall	R13	R13	R13
Wood Floor	R13	R13	R13
U-factor	0.65	0.40	0.40
Skylight	0.75	0.65	0.65
SHGC	0.30	0.25	0.25

2012 & 2015 IECC - Residential

R402.4 Air Leakage (Mandatory)

The 2012 IECC deleted the option to ***inspect*** or ***test*** for air leakage. It is now mandatory to perform both and the code increased the tightness requirements.

In most cases, **mechanical ventilation** will be required in houses that meet the air tightness requirements.

© Retrotec Inc

A blower door is used to test the tightness of the house

2012 & 2015 IECC - Residential

R402.4 Air Leakage (Mandatory)

CHANGE SUMMARY:

In the 2012 IECC, **total leakage** is the only acceptable test method.

The allowable leakage performance numbers has changed from **7 air changes** down to **5**.

This is a Rough-in Total Leakage test, without the air handler installed. The blower and manometer are the only equipment required

2012 & 2015 IECC - Residential

R403.1.1 Programmable Thermostat

The **thermostat** shall be initially set by the manufacture to:

Heat – 70 degrees

Cool – 78 degrees

2012 & 2015 IECC - Residential

R403.3.3 Duct Testing (Mandatory)

Ducts are required to be pressure tested to determine **air leakage**.

A written report signed by the party performing the test must be given to the City.

Total leakage </= 4cfs/100sq of conditioned floor space

2012 & 2015 IECC - Residential

R403.5.3 Pipe Insulation

The insulation provisions for **hot water** pipes have increased the minimum R-value to **R-3**.

2012 & 2015 IECC - Residential

R403.6 Mechanical Ventilation (Mandatory)

R403.6

The building shall be provided with **ventilation**.

Outdoor **air intakes** and **exhausts** shall have automatic or gravity dampers that close when the ventilation system is not operating.

An air exchanger may be used to satisfy the whole house ventilation requirement

2012 & 2015 IECC - Residential

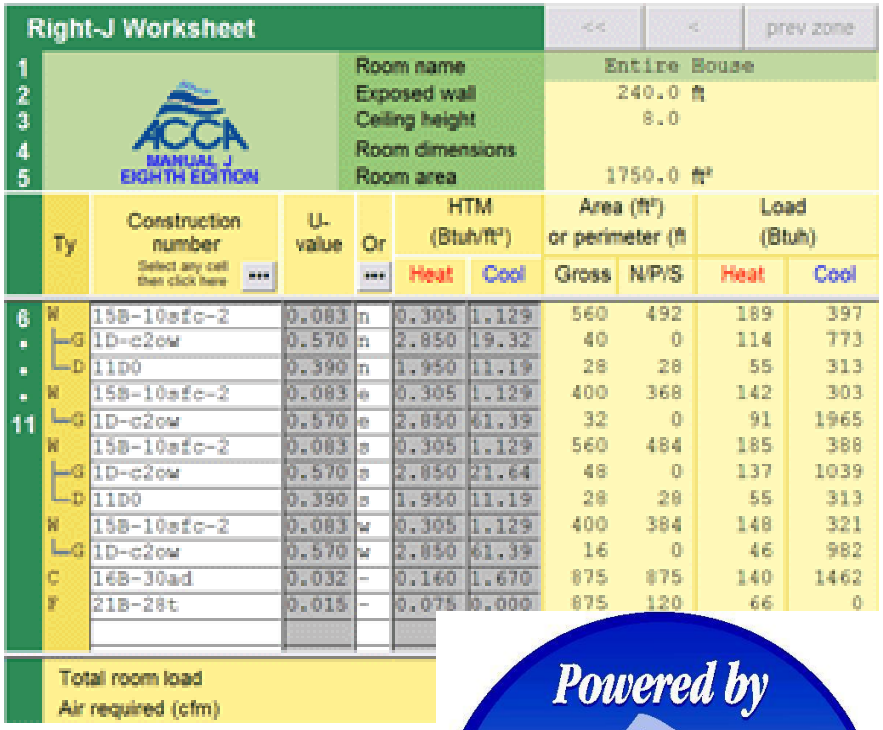
R403.7 Equipment Sizing and Efficiency Rating

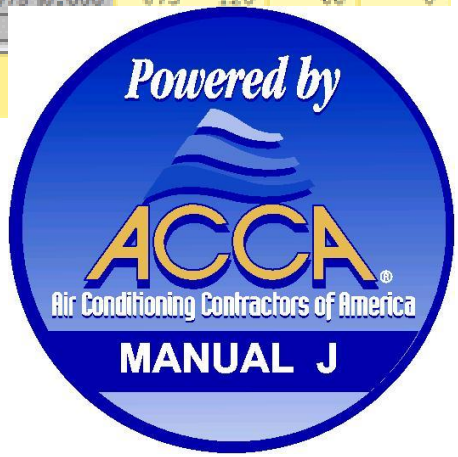
Heating and Cooling equipment shall be sized with:

ACCA Manual S

in accordance with

ACCA Manual J.





2012 & 2015 IECC - Residential

R404.1 Lighting Equipment (Mandatory)

The **50%** high-efficacy bulb requirement has been increased to **75%**

(excludes low-voltage lighting)

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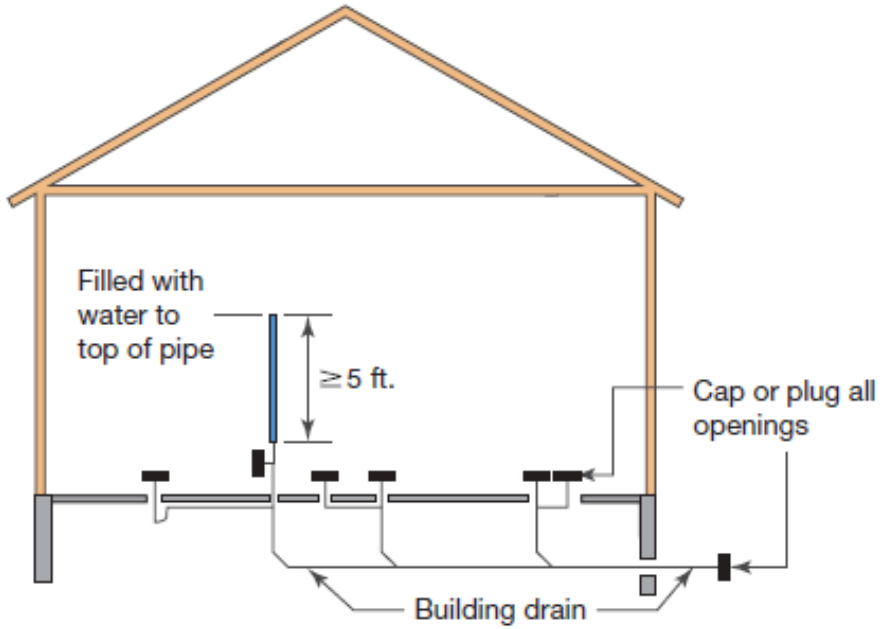
Typical low voltage bulb.

Gillmar/www.Shutterstock.com

Residential Plumbing
Chapter 25-33

Residential Plumbing
Chapter 25-33

P2305.3 The **head pressure** for a water test on drain, waste, and vent (DWV) systems has been reduced from **10 feet** to **5 feet**.



Test 1 – Below Slab

Residential Plumbing
Chapter 25-33

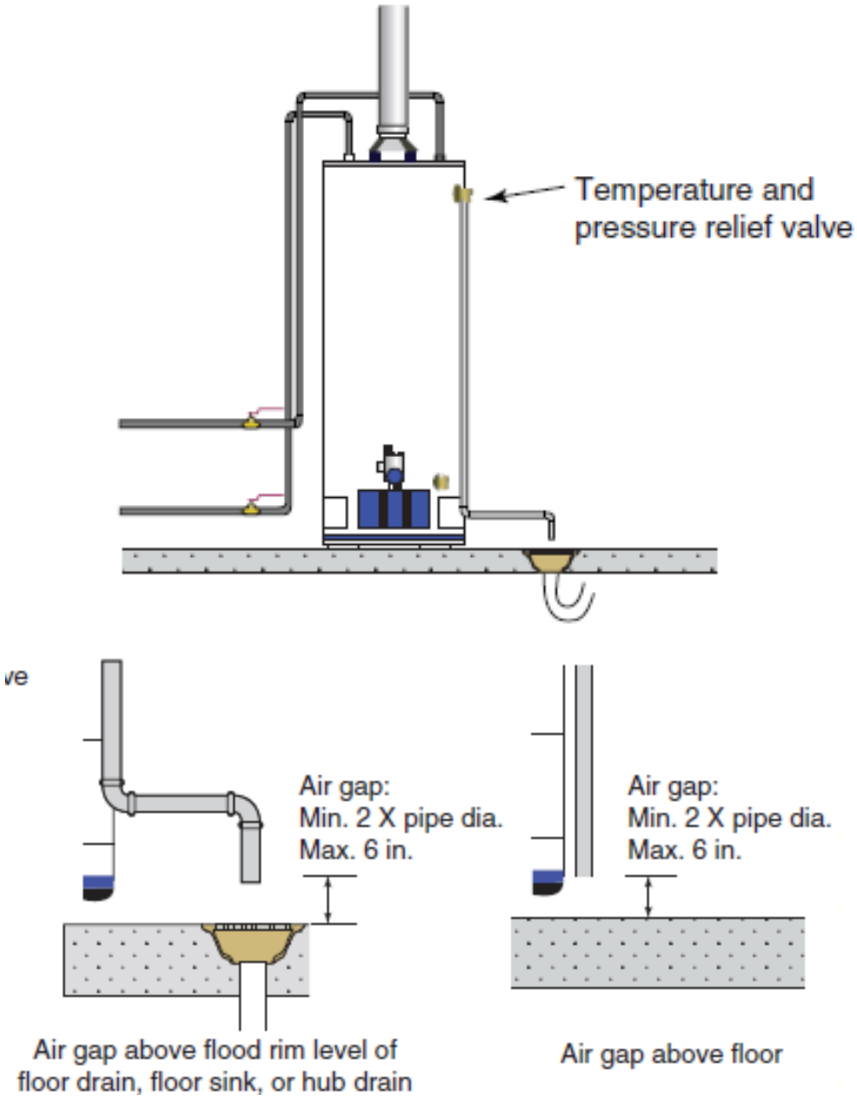
P2801 The code requires drain valves with a threaded outlet for water heaters.

A pan drain is not required when a water heater is replaced and there is no existing drain.

Residential Plumbing
Chapter 25-33

P2804.6.1 The **T&P relief valve discharge pipe** termination must have an **air gap** suitable to protect the potable water supply system.

PEX and **PE-RT tubing** used for relief valve discharge piping must be one size larger than the **T&P valve discharge outlet** and the outlet end of the tubing must be fastened in place.



Residential Plumbing
Chapter 25-33

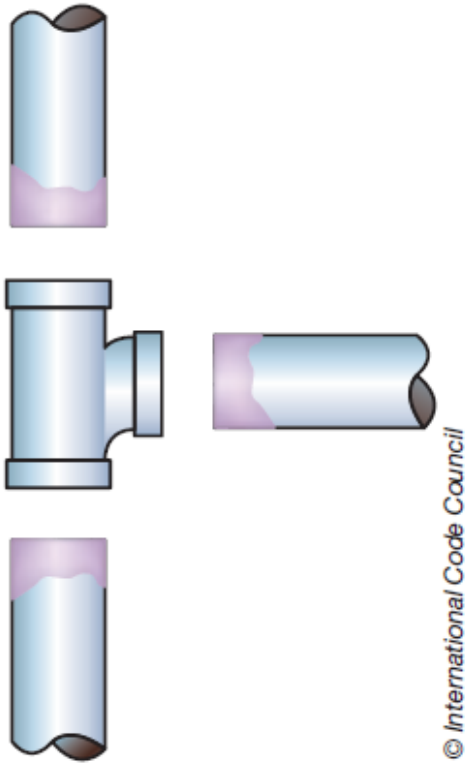
P2910 to P2913
Nonpotable water outlets, such as hose connections, that utilize **nonpotable** water must be identified with a warning and a symbol that **nonpotable** water is being used. The color **purple** is established for identifying distribution piping conveying **nonpotable** water.

Nonpotable water is utilized for _____.
CAUTION: NONPOTABLE WATER. DO NOT DRINK

Nonpotable water outlets such as hose connections require warning signs with a pictograph.

Residential Plumbing
Chapter 25-33

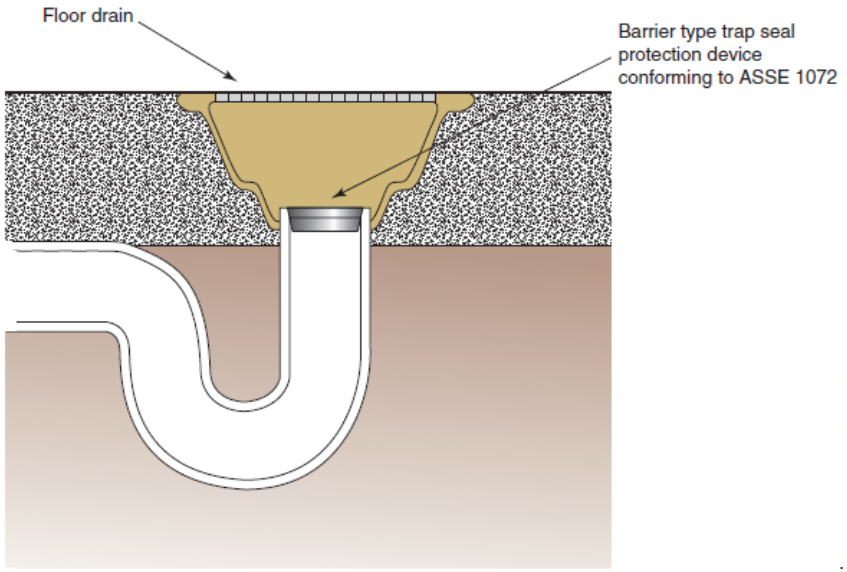
P3003.9 The application of a **primer** to drain, waste, and vent PVC pipe and fittings prior to solvent cementing is not required for **4-inch pipe size and smaller**, provided that the piping is for a non-pressure application.



Purple primer is no longer required for joints of non-pressure PVC DWV piping 4 inches or less in diameter.

Residential Plumbing
Chapter 25-33

P3201.2 Trap seal protection against evaporation can now be accomplished in a variety of ways, including **trap seal primer valves** supplied with nonpotable water and **barrier-type trap seal protection** devices.



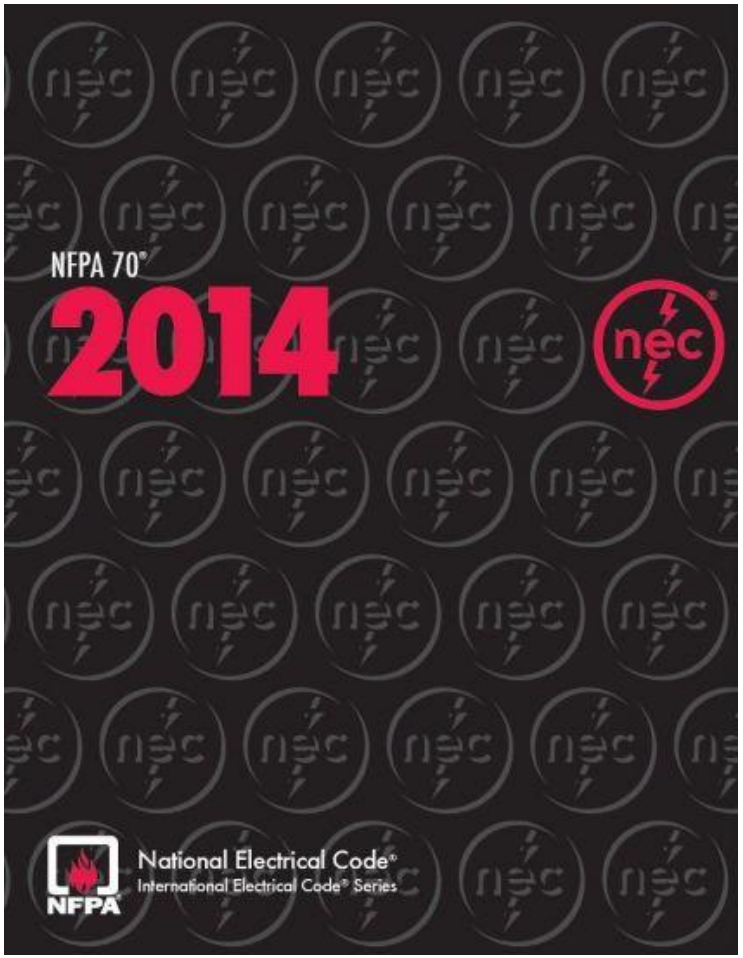
A barrier-type trap seal protection device is one of four methods of protecting the floor drain trap seal from evaporation.

Residential Electrical
Chapter 34-43

2014 NEC
Residential Electrical

State Law:

- State adopted the **2014 NEC** **Sept 01, 2014**
- All licensed electricians must wire to **2014 NEC**
- Local municipalities may not reduce requirements of the state adopted code.
- Local municipalities may create local amendments that are more stringent.



2014 NEC

Article 100 Definitions – Readily Accessible

Capable of being reached quickly for operation, renewal, or inspections without the use of:

tools;

climb over obstacles;

remove obstacles;

resort to portable ladders.

2014 NEC

210.8(A)(10) – GFCI for Laundry Areas

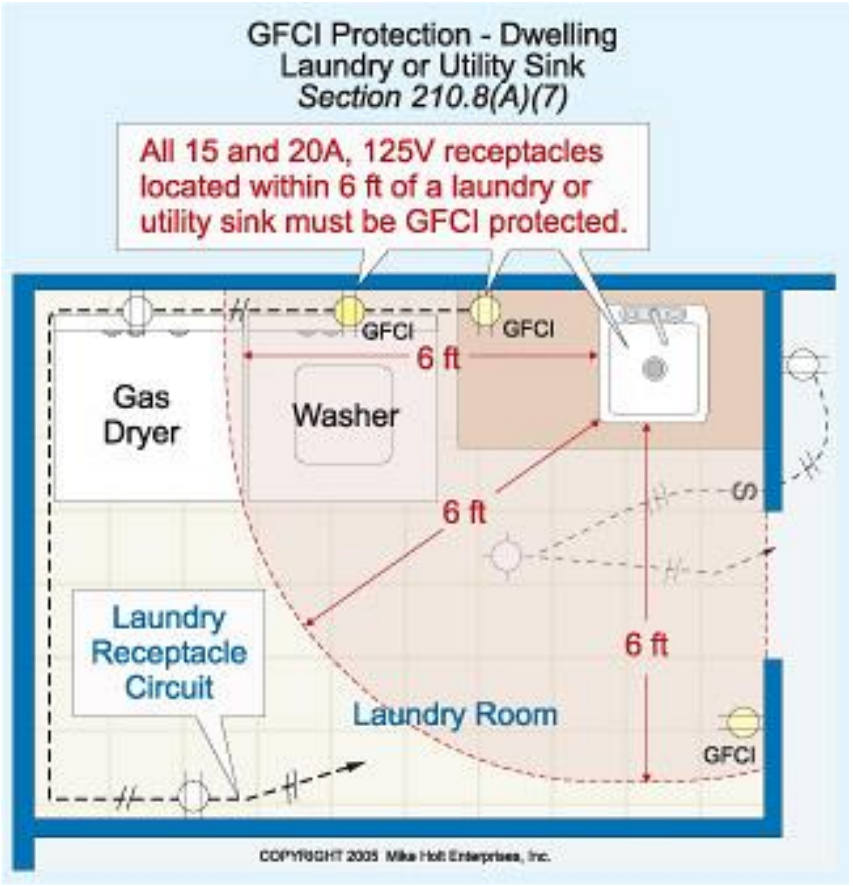
GFCI protection is required for all 125 volt, single phase 15- and 20-amp receptacles installed in **Laundry Areas**.

(Note: Laundry area is not defined)

2014 NEC

210.8(A)(7) – GFCI for Dwelling Unit Sinks

GFCI protection is required for all 125 volt, single phase 15- and 20-amp receptacles installed within **6 feet** of the outer edge of a **sink**.



2014 NEC

210.8(A)(9) – GFCI for Bathtubs or Shower Stalls

GFCI protection is required for all 125 volt, single phase 15- and 20-amp receptacles installed within **6 feet** of the outer edge of the **bathtub** or **shower stall**.

2014 NEC

210.8(D) – GFCI for Dishwashers

GFCI protection shall be provided for outlets that supply **dishwashers** installed in dwelling unit locations.

2014 NEC

210.12(A) AFCI Protection

The list of rooms in dwelling units has been expanded to include:

Kitchens

Laundry rooms

(Leaves bathroom & garage)

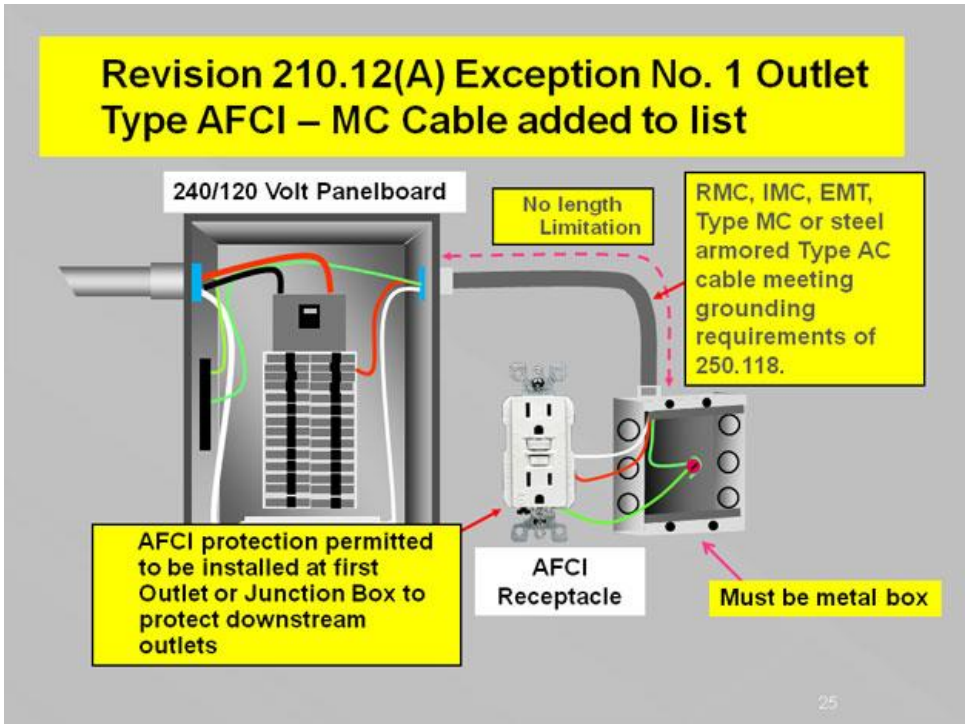
AFCI Combination Device

AFCI Device

2011 NEC

210.12(B) AFCI Extensions or Modifications

Branch circuit **modifications**, **replacements** or **extensions** shall be **AFCI protected**. A listed **AFCI outlet** may be used at the first receptacle outlet.



AFCI Combination Device

AFCI Device

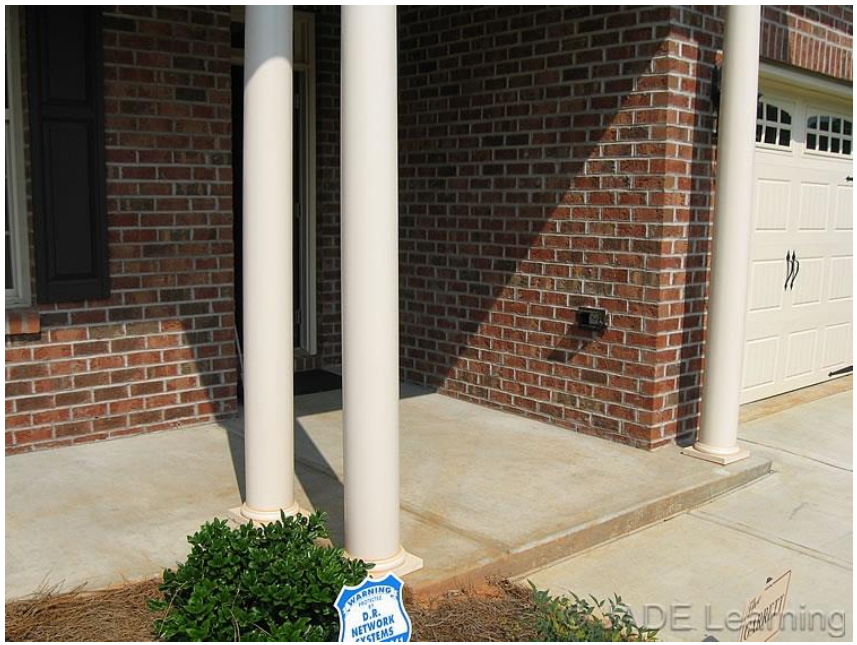
2014 NEC

210.52(E)(1) & (E)(2) Outdoor Outlets

One & Two-family and

Muti-family dwelling **outdoor** receptacles shall be readily accessible.

(Max 6 ½ feet above grade)



2014 NEC

210.52(E)(3) Balconies, Decks & Porches

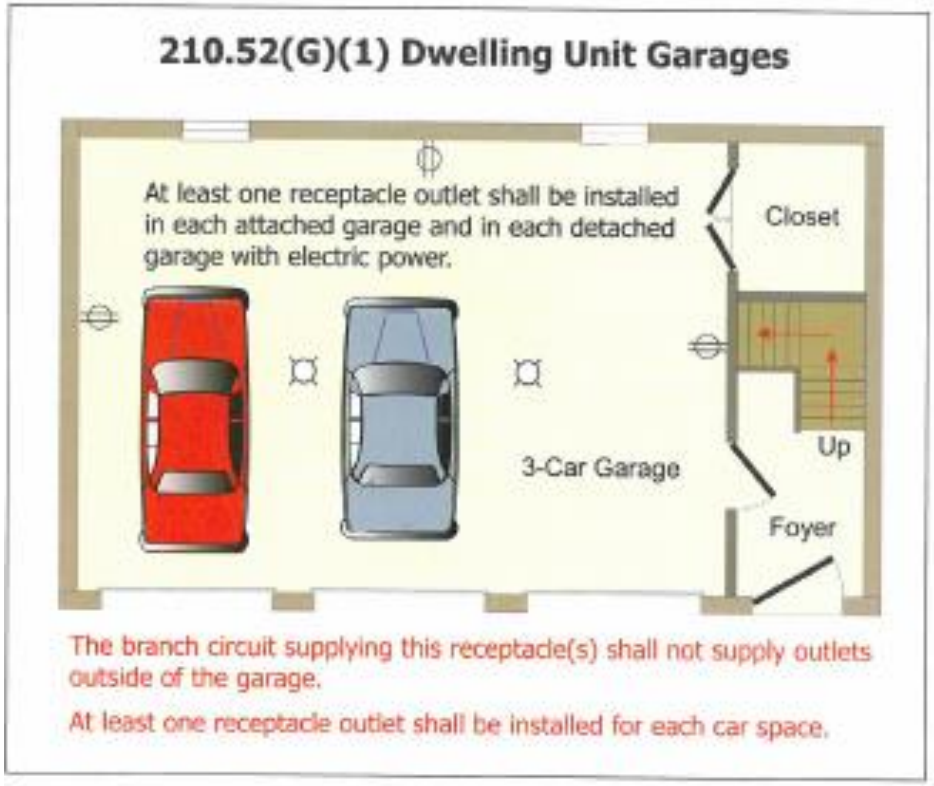
CHANGE SUMMARY:

Attached **balconies**, **decks** and **porches** on dwelling units are required to have at least one **receptacle outlet** accessible from the balcony, deck or porch.

2014 NEC

210.52(G)(1) Dwelling Unit Garages

At least <u>one</u> **receptacle** is required for each **car space** and shall <u>not</u> supply outlets outside of the garage.



2014 NEC

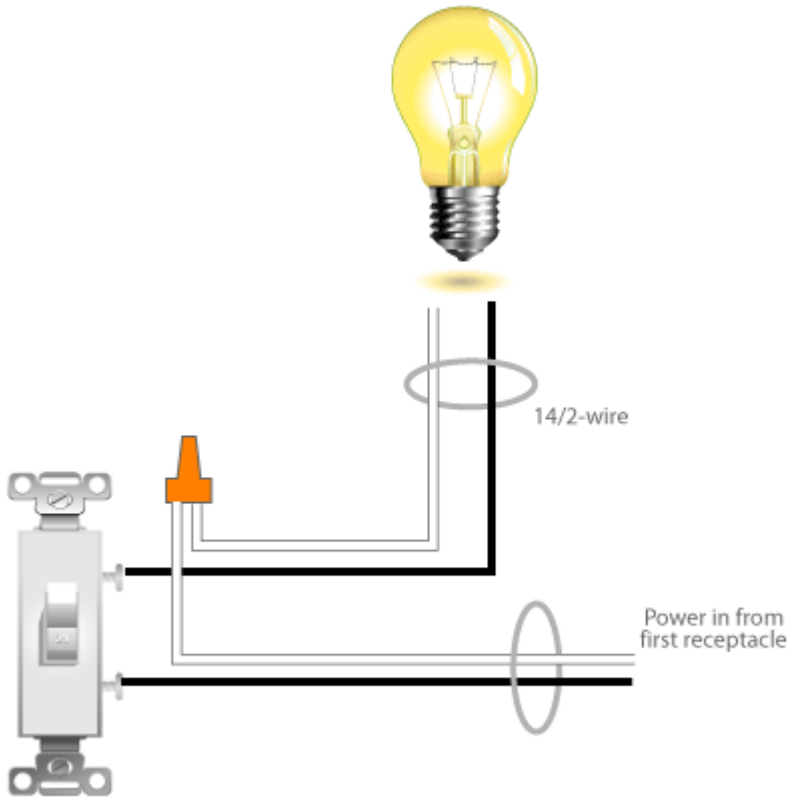
314.27(A)(2) Outlet Boxes

Outlet boxes used to support **ceiling-mounted luminaires** that weigh more that **50 lbs.** are required to be marked on the inside with the maximum weight the box will support.

2014 NEC

404.2(C) Switched Connections (lighting loads)

The **grounded conductor** (neutral) shall be provided at the location where switches control lighting loads.



2014 NEC

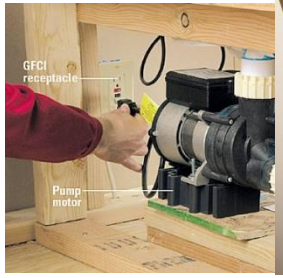
406.9(B)(1) Receptacles in Damp or Wet Locations

Extra duty covers are required for all 15- and 20-amp, 125- and 250-volt receptacles installed in **wet locations.**

2014 NEC

680.73 Hydromassage Bathtubs - Accessibility

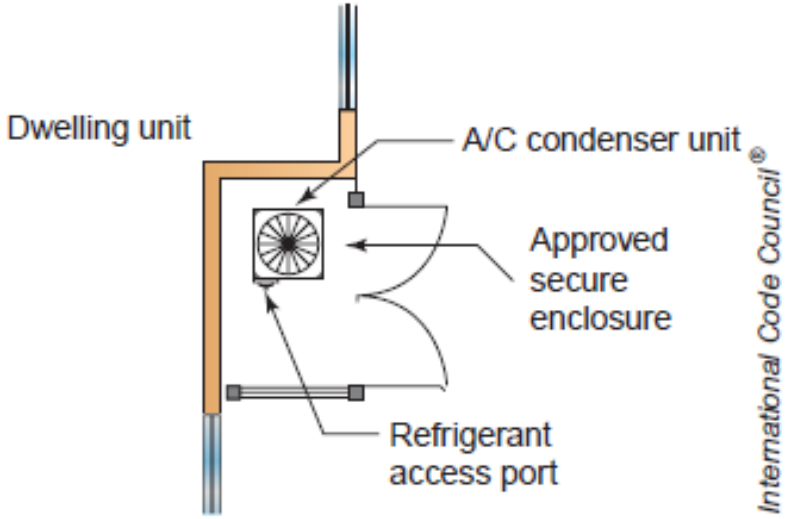
Hydromassage bathtub electrical equipment shall be **accessible** without damaging the **structure** or **finish**. Cord & plug connected motor's receptacle shall be located within **1 foot** of service opening.



Residential Mechanical
Chapter 12-23

Residential Mechanical Chapter 12-23

M1411.6 Refrigerant circuit **access ports** located outdoors shall be fitted with **locking-type tamper resistant caps** or shall be otherwise secured to prevent unauthorized access.



Protection of refrigerant access ports.

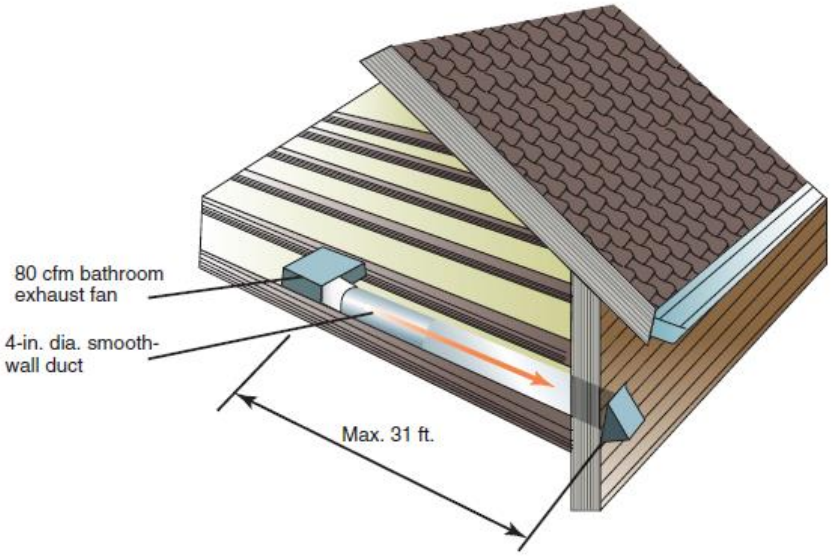
Residential Mechanical Chapter 12-23

M1502.4 The code now recognizes the use of **dryer exhaust duct power ventilators** (DEDPVs) to increase the allowable exhaust duct length for clothes dryers.

Maximum length per manufacturer's instruction

Residential Mechanical Chapter 12-23

M1506.2 The code establishes maximum **exhaust duct lengths** based on **duct diameter**, **type of duct** and the exhaust fan **airflow rating**.

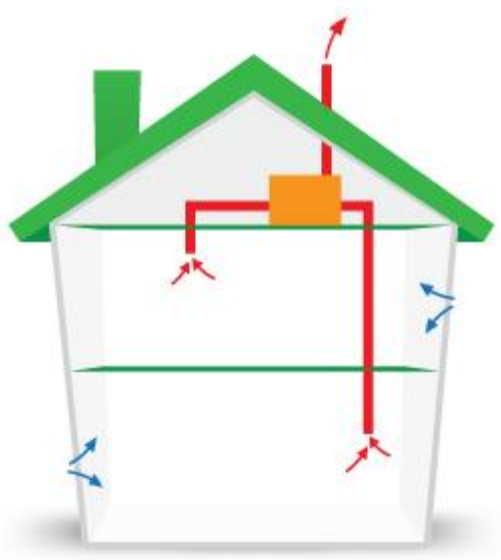


Maximum length of exhaust duct is based on fan rating and type and diameter of duct.

Ex: 80 cfm bathroom fan w/4" smooth wall duct = max 31' total length

Residential Mechanical
Chapter 12-23

M1507.3 Whole-house ventilation exchanges **outdoor air** for **indoor air** at the minimum air-flow rates based on the area of the dwelling and the number of bedrooms.



Ex: 1,501 to 3,000 sq ft house with 2-3 bedrooms = 60 CFM air flow

Fresh Air In-take

(on return air system)

Residential Mechanical Chapter 12-23

M2301 THERMAL SOLAR ENERGY SYSTEMS

Thermal systems circulate **water** through roof solar panels to provide or supplement hot water for the dwelling.

M2302 PHOTOVOLTAIC SOLAR ENERGY SYSTEMS

Photovoltaic (PV) solar panels generate electricity from the sun's energy. PV systems may be stand-alone or grid systems.

CBOA Ordinance Review Meeting

July 20,2015

(1:30pm City Hall)

Presentations on Permits Website

Killeen, Texas

Official Website for the City of Killeen, Texas

City
Serv
Shar

Departments | Newcomers | Residents | Commercial

The Building Inspection Division

Upcoming public workshop to discuss significant code changes
between the 2009 and 2015 I-Codes and between the 2008 and 2014 NEC

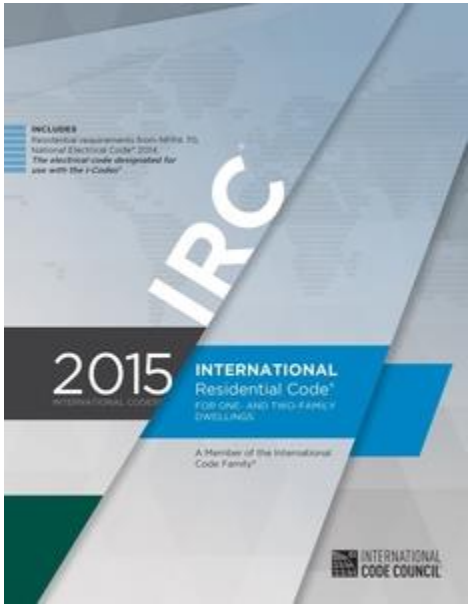
- April 1, 2015 Presentation (IMPC, NEC)
- April 8, 2015 Presentation (IPC, IFGC)
- April 15, 2015 Presentation (IMC, IECC)
- April 22, 2015 Presentation (IEBC, IBC)
- April 29, 2015 Presentation (IRC - Part 1)
- May 6, 2015 Presentation (IRC - Part 2)

Building Codes

The following City codes, State and Federal laws have been adopted or apply to construction in the City of Killeen. They provide the minimum requirements to secure the beneficial interest, which are public safety, health and general welfare -- through structural strength, stability, sanitation, adequate light and ventilation, and safety to life and property from fire and other hazards attributed to the built environment, including alteration, repair, removal, demolition, use and occupancy of buildings, structures or premises. The following construction codes are adopted and amended in Chapter 8, Killeen Code of Ordinances unless otherwise noted.

Questions?


Questions
Answers


IRC
2015
INTERNATIONAL
Residential Code
INTERNATIONAL CODE COUNCIL